Translation and Implementation Research in VA:
The Agenda for Caregiving

Joseph Francis, MD, MPH
Deputy Chief R&D Officer (acting)
Office of Research and Development
Department of Veterans Affairs
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VA Research Mission

A Congressionally-mandated Veterans Health Administration mission:

"To discover knowledge and create innovations that advance the health and care of veterans and the nation."

Remembering those we serve …

VA Research Standards

- **Is the research based on:**
  - **Rigorous science?**
  - **The highest ethical standards?**
- **Will it produce data that will drive clinical policy?**
- **Will it translate to improved health care?**

  Will it help veterans?

Rich 50 Year History

- **3 Nobel Prize winners**

- **6 Lasker Award winners**

- **Important Discoveries and Inventions**
  - Cardiac Pacemaker
  - Radioimmunoassay
  - CT Scanner
  - **Treatments**
    - Tuberculosis
    - Hypertension
    - Heart Failure

VA Research Assets

- **Large, integrated health system**
- **Databases & electronic health record**
- **Engaged leadership**
- **Outstanding investigators**
- **Support from operations**
- **Academic Affiliations**
- **Training Programs**
- **Intramural funding program**

Intramural Research Program

- **VA Research is an intramural program**
- **Researchers must be employed by VA**
- **Unlike agencies such as the NIH or DoD, VA has _no_ statutory authority to make research grants to non-VA entities**

VA Research Programs

- **VA Research and Development:**
  - ➤ **Biomedical & Laboratory Science**
  - ➤ **Clinical Science**
  - ➤ **Health Services**
  - ➤ **Rehabilitation R&D**

VA Research Partners

- **Patient Care Services**
  - ➤ **MIRECCs, GRECCs, PADRECCs**
  - ➤ **National Center for Prevention**
- **Public Health & Environmental Hazards**
- **National Center for Patient Safety**
- **Office of Quality and Performance**
- **Office of Academic Affiliations**
- **VISNs and VAMCs**

Types of Research Sponsored

- **Investigator-Initiated Research**
- **Research Career Development**
- **Cooperative Studies Program**
- **Centers of Excellence**
- **Special Initiatives (e.g., Gulf War Illnesses, PTSD, Polytrauma, & TBI)**
- **Quality Enhancement Research Initiative**

Research Areas with Caregiving Links

- **OIF/OEF/Deployment Health**
  - **Physical and mental health consequences**
- **PTSD**
  - **Identify mechanisms and promote recovery**
- **Blast-Related Injuries**
  - **Amputation & Polytrauma**
  - **Traumatic brain injury & Spinal cord injury**
  - **Burns**
  - **Complex medical complications**

Research Areas with Caregiving Links

- **Chronic Diseases:**
  - Diabetes - 20% of VA patients have diabetes
  - Obesity - 73% of VA patients overweight
  - Parkinson's Disease – 41,000 veterans in US
  - Alzheimers Disease and other aging-disorders
  - HIV and Hepatitis C
  - Serious mental illness

Research Areas with Caregiving Links

- **Substance Abuse**
  - ➤ **Alcohol, tobacco, other drugs**
- **Long-Term Care**
  - ➤ **Million veterans 85 years and older by 2012**
- **Women's Health**
  - ➤ **Women are 15% of active military today; will be 10% of VA patients by 2010**
- **Health Disparities**
  - ➤ **Reducing barriers to quality care among traditionally underserved populations**

Strategy

VHA Strategy:
"Eight for Excellence"

- **Continuously improve health and safety**
- **Provide timely and appropriate access**
- **Patient-centered care & excellent service**
- **Foster a culture that encourages innovation**
- **Promote excellence in business practices**
- **Focus research on clinical and system improvements for health**
- **Enhance partnerships with affiliates**
- **Promote healthy communities**

VHA R&D Initiatives

- **Strategy 6.1: Identify and assess opportunities for Genomic Medicine**

- **Strategy 6.2: Increase collaboration between Research and Operations to improve care delivery**

Genomic Medicine – why VA?

- **Most disease has a genetic component**
- **Genomic medicine's potential to improve health still unrealized**
- **VA is uniquely positioned to provide translate genomic insights into clinical care**
- **It makes good sense**

Research – Operations Collaboration

- **VHA is a unique laboratory for research translation:**
  - ➢ **Moving from pre-clinical to clinical studies**
  - ➢ **Implementing evidence into practice**
  - ➢ **Using practice to generate evidence**
- **Successful models already exist (QUERI, GRECC, MIRECC) and need to be expanded to new types of research**
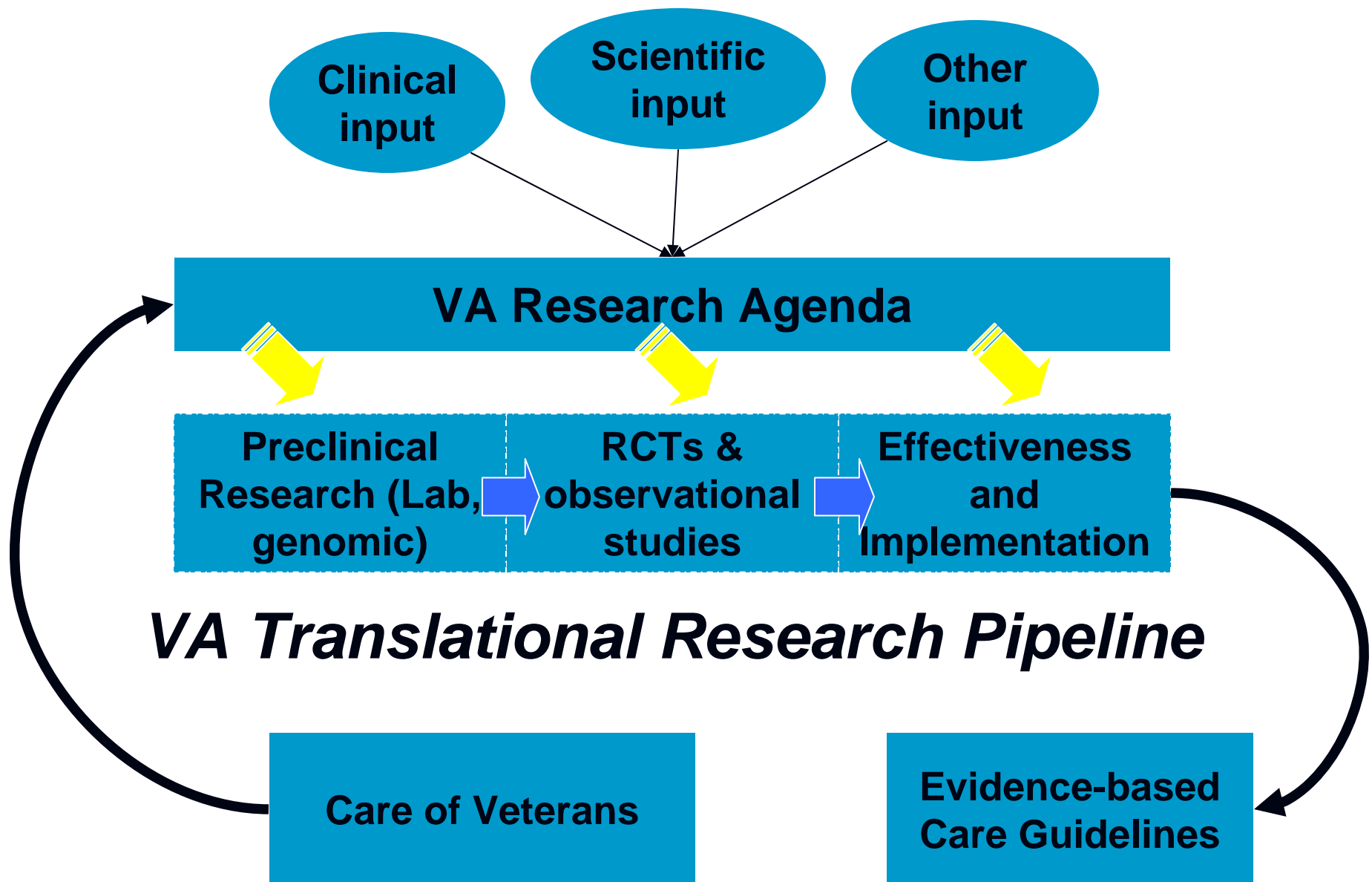
Necessary Enablers

- **Addressing human subject protection issues**
  - ➢ **Research and QI are a continuum**
- **Matching Review criteria and processes to the needs of the organization**
  - ➢ **Rigorous**
  - ➢ **Relevant**
  - ➢ **Responsive**
- **Developing implementation researchers**

Informatics:
the mortar that binds

- **VA information systems have enabled HSR&D**
- **New challenges:**
  - **Enhancing the EMR**
  - **Improving Research efficiency**
  - **Setting the Research Agenda from the EMR**
  - **"Basic Science" challenges:**
    - **Genomic – Clinical correlations**
    - **Mining free text**

Translation

Clinical input

Scientific input

Other input

VA Research Agenda

Preclinical Research (Lab, genomic)

RCTs & observational studies

Effectiveness and Implementation

VA Translational Research Pipeline

Care of Veterans

Evidence-based Care Guidelines

QUERI's Mission

To enhance the quality, outcomes and efficiency of VA health care by systematically implementing / translating evidence-based clinical practices and research findings into routine clinical practice

The Six-step QUERI Process

1. **Identify condition**

2. **Identify best practices**

3. **Define existing practice patterns and variations**

4. **Develop and implement changes**

5. **Document outcomes and system improvements**

6. **Document improvements in quality of life**

QUERI Coordinating Centers

- **Stroke**
- **Diabetes**
- **HIV/AIDS**
- **Ischemic Heart Dz**
- **New for 2005:**
  - *CHF*
  - *Polytrauma*

- Mental Health
- Spinal Cord Injury
- Substance Use Disorder
- Colorectal Cancer
- Consider for 2006:
  - *Acute Care*
  - *Long Term Care*

QUERI Caregiving Initiatives

- **Patient (and family) self-management of chronic illness**

- **Special VA populations:**
  - ➢ **Spinal cord injury – Pressure ulcer prevention & care using digital image transmission**
  - ➢ **Polytrauma and Blast-related Injuries – Enhancing caregiver resilience & tracking burden**

- **Rapid response initiative: Effects of Recent Natural Disasters**

Advancing Caregiving Science

- **Build Collaboration:**
  - ➢ **QUERI Executive Committee**
  - ➢ **QUERI Implementation Research Coordinator**
- **Test models of Care Delivery:**
  - ➢ **Chronic Care Model**
  - ➢ **Collaborative Care**
- **Use Change Models/Theoretical Frameworks**
- **Publishing and Disseminating:**
  - ➢ **Online journal: Implementation Science**
  - ➢ **Web resources: www.hsrd.research.va.gov/QUERI**

Summary

Making Translation Happen: It Takes a Health System

- **Commit to Mission: Providing high quality health care based on the best available evidence**

- **Embed the researchers within delivery system**

- **Partner with the "effector arms" including policymakers and clinical leaders**

- **Keep the work Relevant, Rigorous, Responsive**